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# The Economic Payoff of Party Membership in China

## **Cover Page Footnote**

I am deeply indebted to Economics 413 (Microeconomics of Development) for introducing me to the causal inference framework for social sciences and especially to Plamen Nikolov for providing countless useful suggestions and comments and encouragement over the course of the project. Any remaining errors are my own.

## **Abstract**

Because political party membership could potentially confer large economic benefits, economists have increasingly turned their attention to the role of political and social status in one's life. The Chinese Communist party is the biggest political party in the world, and members are often motivated to join for economic reasons. Previous studies examine the relationship between Communist party membership and earnings and find positive correlation but this correlation may be partly or totally spurious, thereby generating upwards-biased estimates of the importance of political party membership – political party membership is likely to be correlated with a variety of other variables, which may well drive the correlation between political party membership and earnings. Using a 1993 housing dataset, this paper estimates the causal effect of Chinese party membership on monthly earnings in two major cities in China by employing a more robust estimation technique than previously used. I contribute to the existing literature by estimating the true causal effect of Communist party membership on wages with a propensity score matching technique, a quasi-experimental method which mimics a randomized control trial by constructing statistically similar control and treatment groups. I find that, on average, membership in the Communist party of China increases monthly earnings by 9 percent.

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## **Introduction: the Economic Value of Political Status**

Because party membership can confer large economic benefits, economists have increasingly turned their attention to the role political and social status plays in one's life. Recent studies in developing countries have shown how political status affects investment in Indonesia (Fishman, 2001), firm value in Jordan (Erkal & Kali, 2012), and wages in China (Li, Liu, Zhang & Ma, 2007). China's rapid economic development and one-party government structure make it an ideal case for a study of the economic value of political status.

The last thirty years mark China's incredible rise from an isolated communist country plagued by cultural upheaval and famine to a global world power with the world's second largest economy. As multiple studies show, in a country like China, political status and connectedness can provide numerous monetary and non-monetary benefits (Morduch & Sicular, 2000; Li et al., 2007; Appleton, Knight, Song & Xia, 2004; Wu, Wu & Rui, 2010).

The Communist party of China is the largest political party in the world (Yuen, 2013). With over eighty million members and growth of an average of one million members per year, the party will likely remain the largest party in the world (Yuen, 2013). More than 80 percent of

upper-classmen at Chinese universities apply for Communist party membership (The Economist, 2014). Rather than joining the party for its ideals, many join because they believe it will better their prospects in the job market, and membership is increasingly seen as a resume booster (Yuen, 2013).

Party membership could translate into better economic outcomes in several distinct ways. Party membership often serves as a signal of a person's ability. As the process is difficult and an applicant must undergo intense scrutiny, a potential employer knows that party membership captures an applicant's ability (Li et al., 2007). Furthermore, membership in the party gives an applicant access to a network of local members, which may help an applicant find a high-paying job (Morduch & Sicular, 2000). Finally, some jobs in the public sector require membership, such as jobs in provincial and local governments (The Economist, 2014). This study focuses on whether the net effect of these mechanisms empirically translate into higher earnings for Communist party members.

I use data from the 1993 China Housing Survey (CHS). The CHS collected a wealth of information on demographics, political affiliation, family relations, housing conditions, etc. from households in two major cities in China: Shanghai and Tianjin. The dataset also includes information on whether or not the respondent was a member of the Chinese Communist party and information on the respondent's monthly earnings. Existing estimates of the effect of political status on economic outcomes rely on Ordinary Least Squares (OLS), which cannot properly detect the true causal effect of party membership on wages. People who join the Communist party may innately differ – due to family background and ability --other than being party members. Such omitted variables can produce biased (i.e., off-target) estimates of the true economic benefit of a political party membership, i.e., the so-called omitted variable bias.

I contribute to the existing literature by estimating the true causal effect of Communist party membership on wages by using a propensity score matching technique, a quasi-experimental method which mimics a randomized control trial by constructing statistically similar control and treatment groups (Rosenbaum & Rubin, 1983, 1984; Imbens, 2004; Imbens & Wooldridge, 2009; Imbens & Rubin, 2014; Abadie, Drukker, Herr & Imbens, 2003; Angrist & Krueger, 2000; Angrist & Pischke, 2009). I find members of the Communist party do receive higher monthly earnings. The OLS method estimates a party premium of almost 15 percent after accounting for location fixed effects and education, while propensity score matching estimates a party premium of 9 percent after accounting for location fixed effects and education. This paper's estimates provide strong evidence that there are large economic monetary benefits to joining the Communist Party of China.

### **The Communist Party of China, Political Capital and the Labor Market**

The Communist party of China is a “vanguard party,” meaning it should consist of the most capable and ideologically enlightened few of society (Xia, n.d.). In order to ensure that members reflect the best of society, the party admission process is long and rigorous. An applicant must show that he or she performs better than his or her co-workers or classmates, have excellent interpersonal skills, and believe in Communist ideology (Li et al., 2007).

In order for the party to determine whether an applicant exhibits these traits, an applicant is assigned an advisor from within the party who supervises his or her progress throughout the application process. The applicant must periodically submit letters to their advisor throughout the process to show dedication, and attend courses on party membership (Xia, n.d.). Finally, each applicant must secure sponsorships from within the party, and enter into a yearlong probationary

period, throughout which their peers are invited to submit letters of feedback on the applicant. Only after that probationary year, each applicant is considered a full member (Xia, n.d.). This entire process can take years of hard work.

Similar to education being a form of investment in human capital (Mincer, 1974; Willis, 1986), obtaining a party membership can serve as a form of investment in political capital in the Chinese labor market (Pan, 2010). As the Communist party attracts the brightest and best of Chinese society, membership in the party serves as a signal of an applicant's ability for employers (Pan, 2010).

Party membership can also play an information role and reveal to employers, in information asymmetric markets, who are the more able and more productive workers. Information asymmetry in the labor market is intrinsic to a situation where (at least initially) employers do not know the future productivity levels of potential employees. In a labor market with no asymmetric information, where employers can perfectly ascertain potential employees' productivity, these kinds of signals would be unnecessary. Employers would be able to accurately assess the ability and productivity of every potential employee, and then hire an employee based on his or her ability match with the requirements for the job. Following this reasoning, employees would receive salaries based on their ability and on commensurate with their marginal product of labor – their contribution to a firm's output.

However, in the real world, the process of matching unemployed workers to suitable jobs with vacancies, and the bargaining process by which salaries are set are hindered by imperfect information (Yashiv, 2007). It is practically impossible for employers to assess precisely a potential employee's ability. Therefore, employers must rely on certain observable signals that may reflect a potential employee's ability and productivity (Spence, 1973). . These indicators

include the potential hire's level of education and whether the potential employee comes well recommended (Velasco, 2012). In China, membership in the Communist party functions as one of these easily observable indicators for employers. These indicators translate directly into economic benefits for the potential employee: (1) they affect the decision of an employer on whether to hire an employee, and (2) they affect the bargaining process by which employees' salaries are determined. In this way, the political capital of party membership should pay off. This paper addresses the question of whether this investment into political capital actually pays off in the form of higher monthly earnings.

### **Towards a More Causal Estimate of the Party Premium**

Multiple studies have attempted to measure the effect of party membership on income. Morduch & Sinclair (2000) measure the effect of being involved in the Communist Party of China (CPC) on household income in rural China. They measured involvement in the CPC on two levels: 1) The household includes a party member and 2) the household includes a party cadre. A party cadre is someone who "holds an official position of political or administrative leadership" (Morduch & Sinclair, 2000). Morduch & Sinclair (2000) argue that in order for transition in a socialist country like China to succeed, rank-and-file officials (in the case of China, party cadres) need to have some incentive to administrate the changes of the transition even if it could have a negative effect on their political and economic status. Subsequently, we should see positive household income effects on having a cadre member in the household. Using an OLS method, Morduch & Sinclair (2000) found that there were large income benefits for those households with a cadre. In households with a cadre, household income was roughly 20 percent higher than the average income of their sample. However, they also found that in

households with just one party member, there was no significant difference in household income. These results show that there may be no economic benefit to being a party member; the benefit only comes at higher levels of Communist party involvement.

While Morduch & Sinclair (2000)'s results shed some light on the party premium, their study's scope is not only not comprehensive, but their study's research design cannot detect the true causal effects of party membership. Morduch & Sinclair (2000) only examined rural China, where the networks and credentials that Communist party membership confers may have little benefit because of a lack of opportunities. In addition, because of their OLS design, they cannot detect true causal effects if observable but not accounted for in the analysis factors (e.g., individual innate ability) are correlated with party membership and earnings.

In contrast, my paper examines the effect of party membership in two of China's major cities, Tianjin and Shanghai, where the benefits provided by networks and credentials could potentially be substantially higher.

Li et al. (2007) uses the Chinese Twins Survey, which collected data on twins in five cities in China. The researchers measure the effect of party membership on income in pairs of twins where one is a member and the other is not. They use twins to account for observable and unobservable differences that result in omitted variable biases in normal OLS estimations. Their OLS estimate suggests that the income of party members was 10 percent higher than non-party members, but when accounting for "within-twin-pair fixed effects" to control for differences in ability and family background, there is no difference in income between party members and non-party members.

While measuring the effect of CPC membership within twin pairs accounts for the bias of ability due to genes, ability consists of more than just genes, justifying further investigation.

Sibling (twin) models not only do not eliminate ability bias (due to non-genetic component of ability) but measurement error can be exacerbated in sibling models. Furthermore, there may be unobservable ways in which twins, or the social environment they grow up in, might fundamentally differ from non-twins. In particular, it is not clear that the relationship between political status and the labor market outcomes for a set of twins can extrapolate to the general population, further limiting the external validity of their results. I attempt to achieve greater external validity in my study by using propensity score matching on a dataset that is more representative of the general population than the sample used by Li et al. (2007). While Li et al.'s use of twins is groundbreaking, their study is by no means conclusive, and my study will complement the existing literature by examining the relationship among a non-twin sample.

### **Data on Party Membership and Earnings**

I use data from the China Housing Survey carried out in 1993 in Tianjin and Shanghai. This cross-sectional dataset was collected at the household level – 2,096 households were interviewed in total, of which 1,054 were in Shanghai and 1,042 were in Tianjin. Data is self-reported and was gathered through a questionnaire that one respondent from each household was asked to complete.

The main topics of the survey questions included housing conditions, family composition, and employment specifics. Information was collected on up to 9 of the respondent's household members, as well as the respondent's spouse, parents and in-laws, regardless of whether they lived in the household. Other data recorded include background information, such as age, sex, education, income, and health. The survey also covered social topics, such as participation in welfare programs, job opportunities, housing allocation and work unit information. Concerning political

affiliation, the respondent chose one of four choices: Communist Party member, Youth League member, Democratic Party member and “no political affiliation.”

Table 1 presents background information and summary statistics for three groups from the dataset: the entire sample, those who are members of the Communist party and those who are not. In this dataset, Communist party members make up 19 percent of the entire sample, and on average, tend to be slightly older than the sample, with an average age of 51, compared to the sample average of 47. Communist party members are also disproportionately male compared to the entire sample. Communist party members are more likely to live in Tianjin as opposed to Shanghai, with 65 percent living in Tianjin, and 50 percent of the entire sample living in Tianjin.

**Table 1**  
**Sample Summary Statistics**

<b>Sample Characteristics</b>	<b>Sample</b>	<b>Non Communist party Members</b>	<b>Communist party Members</b>
City of Residence:			
Tianjin	49.71%	46.13%	65.38%
Shanghai	50.29%	53.82%	34.62%
Monthly Earnings (RMB)	307.77 (155.093) (approx. 49.62 USD)	298.59 (157.93) (approx. 48.14 USD)	346.21 (136.24) (approx. 55.82 USD)
Member in the Communist party	18.61%	0%	100%
Han	98.47%	98.53%	98.21%
Male	60.31%	56.15%	78.46%
Age	47.39 (13.76)	46.50 (14.03)	51.27 (11.79)
Religious	4.3%	4.76%	2.31%
Married	86.07%	84.76%	91.79%
In Poor Health	10.16%	9.96%	11.03%
Education Level			
No Schooling	5.44%	6.27%	1.79%
Elementary	13.26%	14.54%	7.69%
Junior High	35.45%	37.51%	26.41%
Senior High	21.28%	21.81%	18.91%
Technical School	2.86%	3.17%	1.54%
Vocational School	7.40%	6.27%	12.31%
3 Year College	8.78%	6.39%	19.23%
Formal College	5.34%	3.93%	11.54%
Graduate School	0.14%	0.12%	0.26%
Number of Obs.	2,096	1,621	390

**Notes:** *Han* is the percentage that reported to be of the Han ethnicity, the majority ethnic group in China. *Male* is the percentage that reported to be male. *Religious* is the percentage that reported to be religious rather than non-religious. *Married* is the percentage that reported to be married rather than single. *In Poor Health* is the percentage that reported to be “in ill health” vs. “good” or “ok.” The education levels are the percentage that reached that particular level of education. Standard deviation when applicable in parentheses. 85 did not report political affiliation.

Furthermore, party members tend to be better educated, as 30 percent of members have completed at least some form of higher education, compared to only 14 percent of the general sample population. Finally, the average monthly earnings of non-members is approximately 269 RMB (approx. 50 USD), while the average monthly earnings of members is 346 RMB (approx. 56 USD), about 22 percent higher than that of non-members. Although, we cannot conclude that membership causes higher earnings, this table shows that a positive relationship between party membership and earnings exists.

The wealth of information on labor market outcomes in this dataset enables me to use the Propensity Score Matching technique to construct control and treatment groups that are statistically similar. Furthermore, the dataset was one of the few available that included data on political affiliation. However, the dataset is not without its limitations. The questionnaires were only administered in two cities, which could present somewhat limited generalizability or external validity of my results to other settings.

### **Empirical Estimates of the Party Premium**

In order to estimate the returns to Communist party membership on monthly earnings in China, I use two methods: the OLS method and the Propensity Score Matching method.

#### *OLS*

In general, the goal of this paper is to estimate an equation of the form:

$$\ln(Earn_i) = \beta_0 + \beta_1 C_i + \epsilon_i \quad (1)$$

where  $Earn_i$  represents monthly earnings, and  $\beta_1$  represents the marginal returns to being a member of the Communist party, represented by the dummy variable  $C_i$ . Subscript  $i$  denotes each individual in the dataset.

Given a set of strong assumptions, the OLS method can produce an unbiased estimate of  $\beta_1$ , which captures the difference in earnings between a party member and non-party member, all else equal.<sup>1</sup>. Just estimating the relationship between  $\ln(\text{Earn}_i)$  and  $C_i$  alone using (1) will lead to omitted variable bias in  $\beta_1$ . The issue is that party membership is likely to be correlated with a variety of other variables, which will drive the estimate of  $\beta_1$ .<sup>2</sup> Innate ability and family background can be two examples of such omitted variables (Lang, 1993). For instance, because joining the Communist party is a rigorous process, those who have more inherent ability will be more likely to be accepted, and at the same time those who have more inherent ability will also be more likely to have higher incomes.

We can attempt to deal with the problem of omitted variable bias due to innate ability (i.e., ability bias) by adding the term  $A_i$ , which captures individual-specific ability and family background characteristics that affect earnings, exogenous from  $C_i$ , and  $\mu$  is the coefficient on  $A_i$ :

$$\ln(\text{Earn}_i) = \beta_0 + \beta_1 C_i + \mu A_i + \epsilon_i \quad (2)$$

Including term  $A_i$  in the OLS regression (1) will likely decrease the estimate of  $\beta_1$  due to omitted variables in (1). Because the China Housing Survey does not include variables that account for all the differences in ability and family background characteristics (as represented by  $A_i$ ), I employ other variables readily available in the dataset to proxy these two constructs.

Next, I add a set of demographic controls, represented by  $\chi^1 \dots \chi^6$ :

$$\ln(\text{Earn}_i) = \beta_0 + \beta_1 C_i + \gamma_1 \chi_1 + \gamma_2 \chi_2 + \dots + \gamma_6 \chi_6 + \epsilon_i \quad (3)$$

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<sup>1</sup> The assumptions necessary for OLS to produce unbiased coefficient estimates (i.e., centered at the true coefficient estimate of the estimand) are: correct specification, strict exogeneity of error term, no linear dependence between regressors and spherical errors (necessary for efficiency of coefficients). OLS can produce consistent estimates of  $\beta_1$  only with strict exogeneity of the error term in (1).

<sup>2</sup> More generally, omitted variable bias occurs when there are variables correlated with both monthly earnings and political affiliation that are not included in the regression.

These controls include dummy variables for sex (whether or not a respondent is male), ethnicity (whether or not a respondent is of the Han majority), age (continuous definition), marital status (whether or not the respondent is married or not), religion (whether or not the respondent is religious or not), and health (whether or not a respondent is in poor health). While this specification includes many variables that will account for biases due to these basic demographic covariates, the coefficient  $\beta_1$  might still be prone to omitted variable bias because of other characteristics related to ability and family background.

In the next specification I run, I use education as a proxy for ability, as it takes greater ability to reach higher levels of education. However, the dataset did not include years of education. Instead, it asks a respondent to choose one choice from a list that best reflects their highest level of education attained. The list includes the following: “*No formal schooling*,” “*Elementary*,” “*Junior high school*,” “*Senior high school*,” “*Technical school*,” “*Vocational school*,” “*3 year college*,” “*Formal college*,” and “*Graduate school*.” I include each education level (omitting “no formal schooling” for collinearity) in the following regression as dummy variables. In addition, I attempt to deal with the *ability bias* by including individual-specific fixed effects<sup>3</sup>:

$$\ln(Earn_i) = \beta_0 + \beta_1 C_i + \gamma_1 \chi_1 + \dots + \gamma_6 \chi_6 + \alpha_1 \theta_1 + \alpha_2 \theta_2 + \dots + \alpha_8 \theta_8 + \epsilon_i \quad (4)$$

Individual and cluster-controls included in that specification will account for differences that are constant across time (this is the so-called fixed term specification). In this specification, each level of education is represented by a dummy variable  $\theta_n$ , with  $\alpha_n$  representing the marginal returns to each level of education.

In my final OLS specification, I include district fixed effects to control for further differences related to the geographic areas where data respondents live. The districts in the city of

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<sup>3</sup> Fixed effects are “dummy variables” that account for attributes – whether observable or unobservable - of the units that do not change over time.

Tianjin included in the dataset are Hepin, Nankai, Hexi, Hedong, Hongxiang, Hebei, Tanggu, Hanggu, and Dagang. The districts in the city of Shanghai included in the dataset are Huangpu, Nanshi, Luwan, Xuhui, Changning, Jingan, Putou, Zhabei, Hongkou, Yangpu, Minhang and Baoshan. Table 1 shows that the Communist party members are more likely to live in Tianjin than Shanghai, implying that differences in location matter. This could be because one is more likely to become a Communist party member if they live closer to the capital (Tianjin is closer to Beijing), or for some other reason. Furthermore, the district one lives in can represent family background to the extent that different districts may include families of different socioeconomic statuses, and certain districts may be home to families that have historically held political influence. To try to control for these differences, I include dummy variables for each district in each city in the following specification:

$$\ln(Earn_i) = \beta_0 + \beta_1 C_i + \gamma_1 \chi_1 + \dots + \gamma_6 \chi_6 + \alpha_1 \theta_1 + \dots + \alpha_8 \theta_8 + \delta_1 \pi_1 + \delta_2 \pi_2 + \dots + \delta_k \pi_k + \epsilon_i \quad (5)$$

In this specification, I add dummy variables for the district a respondent lives in, represented by  $\pi_1 \dots \pi_k$ .  $\delta_k$  is the coefficient for each  $\pi_k$ . In this final specification I have controlled for demographic differences with the covariates  $\chi_k$ , ability differences with the education dummies  $\theta_k$ , and family background differences with district dummies  $\pi_k$ .

To gauge the magnitude and direction of the omitted variable bias, I can examine how  $\beta_1$  changes across specifications (1) through (5). If the estimate of  $\beta_1$  decreases from (1) to (5) then adding variables in the OLS estimations indeed reduces the omitted variable bias and the initial OLS estimation (1) is upward biased.

### *Propensity Score Matching and Matching on Observables*

In addition to the OLS method, I also employ a propensity score matching method (PSM) to estimate the effect of membership in the Communist party on monthly earnings. By using PSM,

I attempt to mimic the statistical approach of a randomized control trial (RCT) based on the literature using matching on observables (Rosenbaum & Rubin, 1983, 1984; Imbens, 2004; Imbens & Wooldridge, 2009; Imbens & Rubin, 2014; Abadie et al., 2003; Angrist & Krueger, 2000; Angrist & Pischke, 2009).

If I could execute a hypothetical randomized control trial to obtain an unbiased estimate of the  $\beta_1$ , I would take a sample of individuals and randomly assign control and treatment groups where those in the treatment group would be randomly assigned to membership the Communist party and those in the control would not have such a membership. Then I would compare the monthly earnings between the two groups to estimate the premium on being in the party. The fact that these two groups are randomized solves the problem of omitted variables bias because theoretically the two groups will be, on average, statistically identical. However, performing this experiment is practically and ethically impossible. Propensity score matching artificially constructs control and treatment groups, allowing me to compare the two groups (Heinrich, Maffioli & Vazquez, 2010).

The first step to propensity score matching is to assign each observation a propensity score (which captures the likelihood of one being a Communist party member). I use the following specification to estimate propensity scores<sup>4</sup>:

$$C_i = \beta_0 + \gamma_1 \chi_1 + \dots + \gamma_6 \chi_6 + \alpha_1 \theta_{12} + \theta_2 + \dots + \alpha_8 \theta_{8+ei} \quad (6)$$

where these variables determining propensity to join the party are: sex (whether or not a respondent is male), ethnicity (whether or not a respondent is of the Han majority), marital status (whether or not the respondent is married or not), religion (whether or not the respondent is religious or not), and education. The estimated  $\hat{C}$  is each observation's propensity score--a value between 0 and 1

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<sup>4</sup> Refer to the OLS section for the definitions of the variables.

that represents the probability an observation being a member of the Communist party based on the characteristics included in the estimation.

I then use the nearest-neighbor matching technique to match observations in the Communist party (actual C of 1) with observations not in the Communist party (actual C of 0) based on their propensity score (estimated  $\hat{C}_i$ ), placing those with the actual C of 1 into the treatment group and those with the actual C of 0 into the control group. This matching procedure produces two groups – a treatment group and a control group that are statistically similar.

The final step is to estimate the effect of membership in the Communist party on earnings. It is represented by  $\beta_1$  in the following equation:

$$\ln(Earn_i) = \beta_0 + \beta_1 \hat{C}_i + \epsilon_i \quad (7)$$

This ‘average treatment effect’ is the mean of the differences between the log monthly earnings outcomes for each observation in the treatment group and the log monthly earnings outcomes for the matched observations in the control group (StataCorp, 2013) represented by  $\beta_1$  in (7).

### **The Party Premium itself: What do the numbers tell us?**

In this section, I present two sets of results – those from the OLS method and those from the propensity score matching method. Table 2 shows the results from the OLS regressions; Table 3 shows the results from propensity score matching.

#### *OLS Results*

Column 1 (of Table 1) presents the results estimated using equation 2. This regression estimated a return of 18.9 percent higher monthly earnings to membership in the Communist party of China, significant at the 1 percent level. It is likely that this estimation suffers from omitted

variable bias, and the bias is likely upward. One reason for this bias is that those who have more education are more likely to be accepted into the Communist party and likely to receive higher earnings.

Column 2 presents the results estimated by equation 3. This regression estimated a return of 11.1 percent higher monthly earnings to membership in the Communist party, also significant at the 1 percent level. This downward change in the estimate is consistent with expectations, for education is controlled for, and the positive effects of education that were reflected in the coefficient on Communist party membership have been sifted out. All of the coefficients on the education covariates were statistically significant, with only the coefficient for graduate school significant at less than the 1 percent level. The coefficients on education are consistent with expectations in both column 2 and 3. As the level of schooling increases, so do the estimated returns to education, with the returns to elementary school at 15.3 percent and the returns to graduate school at 64.5 percent. There are no notable differences between regressions in the estimated coefficients.

Column 3 presents the results estimated by equation (5). This regression estimated a return of 14.7 percent higher monthly earnings to membership in the Communist party, also significant at the 1 percent level.<sup>5</sup>

### *Propensity Score Matching*

Table 3 presents the results from the propensity score matching method.

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<sup>5</sup> While not included in the table, the coefficients on the district dummy variables have some interesting implications. All of the coefficients on the districts in Tianjin except for one are significant at the 1 percent level, while none of the coefficients on the districts in Shanghai are statistically significant. This could be because only 34.62 percent of Communist party members included in the dataset live in Shanghai, meaning there may not have been enough observations to result in statistically significant values for the Shanghai district.

As opposed to regressing covariates on the log of monthly earnings, this method mimics a randomized control trial by creating treatment and control groups that are statistically similar in all aspects accounted for in the specifications creating the propensity scores. The coefficient represented in each column is determined from the regression in equation (7). I find an average treatment effect of a 9 percent return to Communist party membership in China. All estimates were significant at the 1 percent level.

**Table 2**  
*Effect of variables on monthly earnings (OLS)*

Dependent Variable: the log of monthly earnings (RMB)			
Explanatory Variables:	(1)	(2)	(3)
Communist party Membership	.189*** (.0257)	.111*** (.0261)	.145*** (.0348)
Han	.080 (.0824)	.0729 (.0799)	-.035 (.111)
Male	.1896*** (.0207)	.159*** (.0204)	.203*** (.0276)
Age	-.00754*** (.000784)	-.00383*** (.00901)	-.00382*** (.00117)
Religious	-.135** (.0538)	-.144*** (.0523)	-.287*** (.0676)
Marital Status	.0672** (.0296)	.0401 (.0292)	.0877** (.0386)
Poor Health	-.167*** (.0343)	-.161*** (.0333)	-.119*** (.0546)
Education Level			
Elementary		.153*** (.0533)	..186*** (.0687)
Junior High		.334*** (.0527)	.366*** (.0685)
Senior High		.343*** (.0554)	.384*** (.0711)
Technical School		.317*** (.0765)	.389*** (.102)
Vocational School		.484*** (.0612)	.536*** (.0786)
3 Year College		.456*** (.0604)	.536*** (.0786)
Formal College		.576*** (.0645)	.669*** (.087)
Graduate School		.645** (.252)	.715** (.326)
Number of Obs.	1994	1994	1994
Education Variable	NO	YES	YES
Fixed effects	NO	NO	YES

**Notes:** Values can be interpreted as the percent change in monthly earnings. Communist party membership is a dummy equal to 1 if the subject is a member of the Communist party and 0 if otherwise. Han is a dummy equal to 1 if the subject is of the Han ethnicity and 0 if another ethnicity. Male is a dummy equal to 1 if the subject is male and 0 if female. Religious is a dummy variable equal to 1 if the subject reported to be religious and 0 if non-religious. Marital Status is a dummy variable equal to 1 if the subject is married and 0 if single. Poor health is a dummy variable equal to 1 if the subject reported to be "in ill health" and 0 if otherwise. The education level variables are dummies equal to 1 if the subject reached the particular level of education, and 0 if otherwise. The third column takes into account location fixed effects, which adds a dummy for each district that equals 1 if the subject lives in the district and 0 if otherwise. Standard Errors in Parentheses, \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

**Table 3**  
***Effect of Communist party Membership on monthly earnings (Propensity score matching)***

Dependent Variable: the log of monthly earnings (RMB)	
Explanatory Variables:	(1)
Communist party Membership	.0947*** (.024)
Number of Obs.	1994

**Notes:** Variables used in estimating propensity score: sex dummy (1 if respondent is male and 0 if female), ethnicity dummy (1 if respondent is of the Han majority ethnicity and 0 if of a minority ethnicity), married dummy (1 if the respondent is married and 0 if single), dummies for education (1 if the respondent achieved the specified level of education and 0 if not) and religion (1 if the respondent is religious and 0 if town). Values can be interpreted as the percent change in monthly earnings. Communist party membership in a dummy equal to 1 if the subject is a member of the Communist party and 0 if otherwise. Standard Errors in Parentheses, \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

### **Threats to Internal Validity**

The propensity score matching technique likely reduces omitted variable bias because of the matching step. While this method may better predict the effect of being in the Communist party on monthly earnings than the OLS regression, its internal validity rests on accurately including factors in specification (6) that influence the treatment variable (i.e., being a Communist party member). In addition, the matching step implicitly assumes that matching happens only on observable characteristics (as opposed to unobservable one that the data cannot capture).

The indicators I use to account for individual ability and family background exhibit several limitations. While the level of education an individual attains does reflect that individual's ability, it is possible that equally able individuals do not reach as high a level of education as they should because, for example, they may not be able to afford higher education. Also, district fixed effects are not a perfect indicator for family background, for while they can reflect things like a particular

family's socioeconomic status, there are many aspects of family background that could affect monthly earnings that cannot be determined simply by the area a family lives in.

## **Conclusion**

One million Chinese citizens join the Communist party of China every year, and over 80 percent of graduating college students apply. Membership in the party is perceived as an investment in political capital that can help one get a better job and higher salaries. Yet, previous literature has overlooked the full array of economic benefits due to party membership.

Using a 1993 China Household Survey, this paper quantifies the wage premium of membership in the Chinese Communist party. Using different specifications to attempt to control for observable and unobservable characteristics, I find that membership in the communist party of China does pay off, in the form of 9 percent higher monthly earnings. This estimate is considerably lower than the OLS estimates, suggesting that OLS estimates of the effect of membership in the Chinese communist party on monthly earnings are upward biased. This paper's PSM estimate is comparable to estimates from papers employing causally robust study designs. Li et al. (2007) measure a party premium of 10 percent outside of within twin pairs, and Appleton et al. (2004) also estimate a 10 percent party premium. The fact that the PSM method results in a comparable estimate to the studies using twins (Li et al., 2007) adds to the existing literature by suggesting that the PSM method can substantially reduce omitted variable bias that plagues OLS estimations. Although I employ a causally robust quasi-experimental method, more research could help researchers understand through what channels party membership translates into higher earnings. Is it because members get access to a network of other members that can connect them to good jobs? Is it because employers take membership as an indicator for ability? The answers to these

questions will be valuable to those interested in Chinese politics and to those interested in disentangling the mechanisms that translate political status into better economic status in China.

The answers to these questions may change as China's political landscape changes. There have already been calls by several politicians to tighten the selection criteria for party membership and make the application process more rigorous (Yuen, 2013). This call for tightening the party membership selection criteria would discourage individuals who want to join the party for economic gains only and to encourage ideological purity within the party.

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